

SYNCHRONIZING WITH THE CURRENT TECHNOLOGY TRENDS

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Software professionals have to synchronize themselves with the new cutting edge technologies or they may be phased out of their work. They can opt this through in-house training by an instructor, by attending a course at a training institute after office hours, or by taking up an online course.

It's no secret to anyone who works in the information technology (IT) industry that continuous learning (induction training for the new employees and re-skilling programs for senior employees) is a must to upgrade technical knowledge. With technology changing rapidly and globalization creating a competitive environment, developers, designers and architects are expected to be aware of and acquainted with the latest in their fields.

Most software engineers, project managers and technical managers agree that ongoing training programs are an important part of their professional life. There are various training methodologies: Trainer- Based, Online computer based training (CBT), Virtual classrooms sessions-for imparting technical or soft skill training. Here's an analysis of the effectiveness of training programs in different modes, and the strong and weak points of different types of training.

Let's start with vendor-based (Rational, Sun, Microsoft and Oracle) training or seminars. To attend these vendor-organized training sessions, we need time off from our official assignments. It is better to choose these courses when you know in advance the published by the vendor. The biggest advantage of these courses is that you will be in sync with the source of a particular technology. The person who has built that application or worked on the application with the vendor will be an expert in his or her field and participants can draw immensely from the experience of such a trainer. Another positive point of this type training is that you get a good opportunity to network with other people, and can get an insight into a variety of technical experiences and perspectives. The only drawback may be that a trainer may miss out critical viewpoints, which would have been forthcoming from a neutral or an unbiased third-party trainer.

In the instructor-based training programs, you'll get sufficient hands-on time to work on the concepts you are trying to learn. The first half session in most such courses is on theory, and the second half session is devoted to hands-on or case study. The trainer will also give you objective questions related to the topics covered in the first theory session. After you and the other participants are through with this set of questions, you may exchange your papers with the others and evaluate your depth of knowledge. If the trainer discusses the solutions with all of you at the end, you'll all feel more comfortable about the subject.

In instructor-led training, the chance for interaction between the instructor and other participants can lead to an in-depth learning experience. It helps to know the problems with an application or a technology as you proceed with the training. Instructors can talk about the relative pros and cons of different technologies in this atmosphere. It is not possible for you to get this feeling from a book or CD-ROM. Most of these instructor-based training programs require three to five days of your time. So you need to stay focused and must remember to take good notes.

Short-term corporate training programs are very intensive and expensive as well. They help in just getting a quick overview of a particular technology subject. If the company sponsors its employee for this kind of training, a good advice is to just go for it. Corporate training schools also know how much value training can add to an engineer's hourly rate, so some of these courses can be very expensive.

There are some people who feel that they just don't learn as effectively in a crash course as they do in a long-term one. For such people, courses in the evening, conducted by local colleges or institutes are recommended. The evening

courses, for which they may have to meet two or three evenings a week, work well for such people, and they can take these even while they are busy on a project. Besides giving them a welcome break from their daily routine, these courses are more economical than short-term corporate training and participants also enjoy interacting with the employees from different organizations. Almost everyone in the evening class has a day job, so they are all in the same boat. Evening programs provide an opportunity for the participants to network with others in the field.

A long-term course could be a problem for someone who travels a lot. So most traditional courses discussed so far are not an option. For this category of learners, Web-based or online training is more suitable. Online training now provides live streaming interaction with audio and online chat with instructors. For interactive classes, participants may need a laptop at certain times but it's kind of cool to be taking a class while sitting in a hotel room, at home or waiting at an airport. Modem speed and bandwidth issues could be major problems when accessing an interactive course during travel. The content of some of these classes could also be archived so that participants can go back and review something they might have missed or forgotten the first time around. Online training isn't a perfect system as

yet, but it helps to complete courses without taking time away from travel or work. It's an on-the-job training concept.

Some of you might have heard about the virtual classroom methodology. In this type of training, participants sitting at different locations can simultaneously attend the classroom session conducted by a trainer at a remote location. Participants are able to raise their queries from a different location and the trainer replies to all these. Again, bandwidth issues come into the picture. Cameras, audio systems and synchronizing software are needed for all the computers connected to the virtual classroom. It takes some time for participants to familiarize themselves with the usage of the tool the first time. Sometimes, participants may face a synchronization problem between audio and video. Otherwise, this is a high-tech and good method for keeping yourself updated.

There are benefits and drawbacks of each of these training methodologies. It's important to choose a course that fits your lifestyle, work and travel schedules and learning style. But make sure you keep your skills up-to-date in cutting-edge technology areas so that you are able to meet quality standards and deadlines in your work.

About the author:

Dr. Sanjay Gupta received his Ph.D degree from the Indian Institute of Technologies, Bombay, India. He is working as a Consultant with Wipro Technologies, India. He is a Sun Certified Java programmer and Sun certified Java Trainer. He has published more than twenty research papers in international journals and presented research papers in more than fifteen international and national conferences. His current areas of research, study, and knowledge dissemination are Java, Swings, J2EE technology, tools like Rational Purify, Rational Pure Coverage, WinRunner and Mathematica.

